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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,793	08/24/2001	Donald L. Nisley	37125-66048	2159
21888 7590 02/14/2008 THOMPSON COBURN, LLP ONE US BANK PLAZA SUITE 3500 ST LOUIS, MO 63101			EXAMINER TORRES, MELANIE	
			ART UNIT 3683	PAPER NUMBER
			NOTIFICATION DATE 02/14/2008	DELIVERY MODE ELECTRONIC

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1 UNITED STATES PATENT AND TRADEMARK OFFICE

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4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES
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8 *Ex parte* DONALD L. NISLEY and JAMES E. MICKELSON
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11 Appeal 2007-3876
12 Application 09/938,793
13 Technology Center 3600
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16 Decided: February 12, 2008
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19 Before TERRY J. OWENS, MURRIEL E. CRAWFORD, and DAVID B.
20 WALKER, *Administrative Patent Judges*.
21 OWENS, *Administrative Patent Judge*.

22
23 DECISION ON APPEAL

24 The Appellants appeal from a rejection of claims 1-10 and 12-21.
25 Claim 11 has been canceled and claims 22-26 stand allowable.

26 THE INVENTION

27 The Appellants claim a bearing assembly having a rotatable flinger

1 configured to form a single-stage rotating seal.¹ Claim 1 is illustrative:
2 1. A bearing assembly, comprising:
3 a bearing insert;
4 a bearing housing adapted to house the bearing insert;
5 a cover removably securable to the bearing housing, wherein the
6 cover extends outwardly beyond an outermost edge of the bearing housing;
7 and
8 a rotatable flinger secured to the cover outwardly beyond the
9 outermost edge of the bearing housing and configured to form a single-stage
10 rotating seal, the rotatable flinger comprising:
11 a first opening therethrough, the first opening being adapted to
12 receive a rotatable shaft and to enable the rotatable flinger to form a
13 compression seal against the rotatable shaft; and
14 an outer flange disposed external to the cover to fling material
15 that comes into contact with the outer flange away from the bearing
16 assembly.

17 THE REFERENCES

18 Tooley	US 4,348,067	Sep. 7, 1982
19 Motsch	US 4,368,933	Jan. 18, 1983
20 Uhen	US 4,781,476	Nov. 1, 1988
21 Grzina	US 4,895,460	Jan. 23, 1990
22 Hatch	US 4,943,068	Jul. 24, 1990
23 Tripathy	US 6,149,158	Nov. 21, 2000

24 THE REJECTIONS

25 The claims stand rejected as follows: claims 1-4, 7, 12-17 and 21
26 under 35 U.S.C. § 102(b) over Grzina and under 35 U.S.C. § 103 over
27 Grzina in view of Hatch; claim 6 under 35 U.S.C. § 103 over Grzina in view
28 of Tripathy; claims 8 and 19-21 under 35 U.S.C. § 103 over Grzina in view
29 of Motsch; claims 9 and 10 under 35 U.S.C. § 103 over Grzina in view of

¹ The Appellants state that flinger 26 rotates with shaft 12 to use centrifugal force to throw clear of shaft 12 and cover 24 any liquids or particulates that contact the flinger, thereby preventing contaminants from entering the bearing assembly (Spec. 5:19-27).

1 Tooley; and claims 5 and 18 under 35 U.S.C. § 103 over Grzina in view of
2 Uhen.

3 OPINION

4 We reverse the Examiner's rejections.

5 We need to address only the independent claims, i.e., claims 1
6 and 13.² Claim 1 requires a rotatable flinger "configured to form a single-
7 stage rotating seal" and claim 13 requires a rotatable member "configured to
8 form a single-stage rotating seal". The Appellants' original disclosure does
9 not include the term "single-stage". That limitation was added to the claims
10 by amendment (filed July 28, 2005).

11 The Examiner argues that "configured to form a single stage seal" is
12 functional language (Ans. 11). That argument is not well taken because that
13 claim requirement is a structural limitation of the recited rotatable flinger or
14 rotatable member, i.e., it is structurally configured as a single-stage seal.

15 The Examiner argues that the transition term "comprising" opens
16 claims 1 and 13 to the single-stage seal having additional stages (Ans. 11).
17 That is incorrect. If the seal had additional stages it would not be a
18 single-stage seal. The Examiner's argument that both a bicycle and a
19 unicycle have a single wheel, *see id.*, is incorrect because a bicycle has two
20 wheels, not a single wheel.

21 In the rejection under 35 U.S.C. § 102(b) the Examiner relies upon
22 Grzina's seal comprising a labyrinth seal (3) and two seal rings (1A, 1B)
23 (fig. 2) as being a single-stage seal (Ans. 5). The Examiner argues that

² The Examiner does not rely upon Tripathy, Motsch, Tooley or Uhen for any disclosure that remedies the deficiency in Grzina or the combination of Grzina and Hatch with respect to the independent claims (Ans. 8-11).

1 because that seal is only one seal it is a single-stage seal. *See id.* The
2 Appellants argue that each of Grzina's labyrinth seal 3 and seal rings 1A and
3 1B is a stage and that, therefore, Grzina's seal is a three-stage seal (Br. 8;
4 Reply Br. 3-4).

5 The Examiner has not provided evidence that one of ordinary skill in
6 the art would have considered Grzina's seal comprising labyrinth seal 3 and
7 seal rings 1A and 1B to be a single-stage seal. In the alternative rejection of
8 claims 1 and 13 under 35 U.S.C. § 103 the Examiner relies upon Hatch's
9 seal as being a single-stage seal (Ans. 8). Hatch, however, states that the
10 seal relied upon by the Examiner as a single-stage seal (i.e., shaft engaging
11 member 15 comprising annular radial ridges or projections 23 and projecting
12 lip element 25 with tip 29) is a two-stage seal (col. 6, ll. 60-61).

13 Thus, the evidence relied upon by the Examiner does not indicate that
14 Grzina's seal is a single-stage seal.

15 The Examiner has the initial burden of establishing a prima facie case
16 of anticipation by pointing out where all of the claim limitations appear in a
17 single reference. *See In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990); *In re*
18 *King*, 801 F.2d 1324, 1327 (Fed. Cir. 1986). Because the Examiner has not
19 established that Grzina discloses a single-stage seal, the Examiner has not
20 carried the burden of establishing a prima facie case of anticipation of the
21 Appellants' claimed invention.

22 As for the rejection under 35 U.S.C. § 103, the Examiner has not
23 established that the combination of Grzina and Hatch, neither of which has
24 been shown by the Examiner to disclose a single-stage seal, would have
25 rendered a single-stage seal prima facie obvious to one of ordinary skill in

1 the art. Hence, the Examiner has not established a prima facie case of
2 obviousness of the Appellants' claimed invention.

3 DECISION

4 The rejections of claims 1-4, 7, 12-17 and 21 under
5 35 U.S.C. § 102(b) over Grzina and under 35 U.S.C. § 103 over Grzina in
6 view of Hatch, claim 6 under 35 U.S.C. § 103 over Grzina in view of
7 Tripathy, claims 8 and 19-21 under 35 U.S.C. § 103 over Grzina in view of
8 Motsch, claims 9 and 10 under 35 U.S.C. § 103 over Grzina in view of
9 Tooley, and claims 5 and 18 under 35 U.S.C. § 103 over Grzina in view of
10 Uhen are reversed.

11 REVERSED

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